

COMBINED DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below, next to my name.

I believe I am the original, first, and sole inventor (if only one name is listed below) or an original, first, and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled Veneer Face Plywood Flooring and Methods of Making the Same the specification of which:

_____ is attached hereto.
X was filed on July 13, 2001
as United States Application Number 09/903,549
or PCT International Application Number _____
and was amended on _____
(if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claim(s), as amended by any amendment referred to above. I do not know and do not believe that the claimed invention was ever known or used in the United States of America before my invention thereof, or patented or described in any printed publication in any country before my invention thereof or more than one year prior to this application, that the same was not in public use or on sale in the United States of America more than one year prior to this application, and that the invention has not been patented or made the subject of an inventor's certificate issued before the date of this application in any country foreign to the United States of America on an application filed by me or my legal representatives or assigns more than twelve months (for a utility patent application) or six months (for a design patent application) prior to this application.

I acknowledge the duty to disclose all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, Section 119(a)-(d), of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

<u>Prior Foreign Application(s)</u>			<u>Priority Claimed</u>	
<u>(Number)</u>	<u>(Country)</u>	<u>(Day/Month/Year Filed)</u>	<u>Yes</u>	<u>No</u>
_____	_____	_____	_____	_____
<u>(Number)</u>	<u>(Country)</u>	<u>(Day/Month/Year Filed)</u>	<u>Yes</u>	<u>No</u>
_____	_____	_____	_____	_____
<u>(Number)</u>	<u>(Country)</u>	<u>(Day/Month/Year Filed)</u>	<u>Yes</u>	<u>No</u>
_____	_____	_____	_____	_____

I hereby claim the benefit under Title 35, United States Code, Section 119(e) of any United States provisional application(s) listed below

<u>60/218,666</u>	<u>17-July-2000</u>
<u>(Application Number)</u>	<u>Filing Date</u>
_____	_____

I hereby claim the benefit of the prior United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

(Application Number) Filing Date (Status – patented, pending, abandoned)

(Application Number) Filing Date (Status – patented, pending, abandoned)

(Application Number) Filing Date (Status – patented, pending, abandoned)

I hereby appoint Toni-Junell Herbert, Registration No. 34,348, Mark R. Shanks, Registration No. 33,781, Keith D. Hutchinson, Registration No. 43,687, Joseph G. Contrera, Registration No. 44,628, Christina M. Gadiano, Registration No. 37,628, Shelly Guest Cermak, Registration No. 39,571, of SHANKS & HERBERT, telephone (703) 683-3600, with a mailing address at:

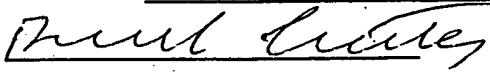
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with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith.

The undersigned hereby authorizes the U.S. Attorneys named herein to accept and follow instructions from undersigned's assignee, if any, and/or, if the undersigned is not a resident of the United States, the undersigned's domestic attorney, patent attorney or patent agent, as to any action to be taken in the Patent and Trademark Office regarding this application without direct communication between the U.S. attorneys and the undersigned. In the event of a change in the person(s) from whom instructions may be taken, the U.S. attorneys named herein will be so notified by the undersigned.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application of any patent issued thereon.

Full Name of Sole/First Inventor: Richard COURTNEY

Inventor's Signature:  Date: 7/16/01

Residence: Vicksburg, Mississippi Citizenship: US
(City, State) (Country)

Post Office Address: 401 Lake Forest Drive, Vicksburg, Mississippi 39180, US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: **COURTNEY**

Appl. No.: 09/903,549

Filed: July 13, 2001

For: Veneer Face Plywood Flooring and Methods
of Making Same

Art Unit: 1734

Examiner:
Gray, Linda Lamey

Atty. Docket: 0223-0001US

DECLARATION UNDER 37 C.F.R. 1.132

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

1. I, Joseph Torrey, am a citizen of the United States and reside at 122 Brookwood Drive Vicksburg, MS 39183.
2. I am an employee of Anderson-Tully Engineered Wood, L.L.C. (ATEW) and have been employed by ATEW for 3 years and 9 months.
3. I have been employed or otherwise worked in the lumber industry for 16 years and have worked with plywood construction for 10 years.
4. I have read and am familiar with the Office Action dated December 16, 2002 and the references cited therein. I have also read and understand the contents of this declaration.
5. I have read and am completely familiar with the invention disclosed and claimed in the US Patent application No. 09/503,549 (the '549 application) by Courtney, entitled "Veneer Face Plywood Flooring and Methods of Making Same.
6. I am personally familiar with the method of manufacture of the invention claimed in the '549 application.
7. I have read and am familiar with the invention disclosed and claimed in US Patent 4,655,860 by Tellman et al (Tellman).

8. In my experienced opinion, the process disclosed and claimed by Tellman is completely different than the process disclosed in the '549 application, and that one of skill in the art would not consider the teachings of Tellman in attempting to create an engineered wood floor product that was as strong as solid wood but more flexible and more dimensionally stable. The problem being solved by the present invention is based on the instability of solid wood flooring due to the internal stresses from varying grain patterns and drying stresses. In solid wood flooring, the stresses reveal themselves as bowing or end-lift from face to back and crook from side to side. The problem behind Tellman is based upon entirely different circumstances dealing with making cheaper, less dense, plywood veneer in mind not flooring. In fact, one of skill in the art would believe that Tellman teaches away from the present invention by showing that plywood made by the Tellman process has significantly reduced strength compared to plywood made without expanded veneer or compared with solid wood.

9. Tellman describes a process for expanding green (wet) plywood veneer sheets for the sole purpose of creating a plywood having less wood in the core inner plies in order to save wood and therefore lower costs. It also provides for a plywood product that is lighter than plywood made without expanded inner ply sheets. In my opinion, the problem with Tellman is that the plywood constructed in this manner is less elastic and weaker than standard plywood. Although Tellman states that this process could be used on dry veneer sheets, in my opinion, this would not be done. In my opinion, the expansions that are disclosed in Tellman could only be achieved with the use of green veneer sheets having very high moisture content, to allow the wood fibers to bend. Dry veneer sheets having 6 - 8% moisture, like the '549 application, would split or crack using that process. Furthermore, Tellman discusses cutting the veneer sheets using thin blades of $1/16^{\text{th}}$ of an inch (0.0625 in.) and then pressing the sheets with enough pressure that a small amount of crushing of the ends of the sheets is achieved. Both Tellman and the present invention are similar only in the fact that the veneer sheets are bonded together.

10. In contrast, the '549 application discloses the piercing of the cut veneer sheets only after they have been dried to a moisture content of 6 - 8%. This piercing provides two benefits: a) it provides stress relief of the grain of the veneer sheet; and b) allows multiple channels for glue to travel between the veneer sheets of the core inner layer. This provides two unexpected properties: 1) the plywood boards have about the same strength as solid hardwood boards; and 2) they are more flexible compared with solid hardwood flooring. This allows the boards to be glued to the floor instead of the normal nailing procedure, which is something one cannot do with ordinary hardwood floorboards. The '549 process is further distinguished from Tellman by virtue of the fact that the piercing dimensions of the veneer sheets of the core inner layer are much larger than the slices made by Tellman. The piercing dimensions are approximately 0.375 X 0.125" and spaced about 0.375" axially and 0.75" transversely, resulting in fewer and larger holes (3x larger) in the sheets. The large piercings allow the glue from the wet sheets to travel from one side of the sheet to the other providing an equilibrium of glue during the pre-press process and providing a vertical layer of glue that gives the added

and unexpected property of additional bonding strength to the plies. Additionally, the pierced veneer sheets are sent only once through rollers which apply only enough pressure to separate the slots and reduce the elastic properties of the sheets. The rollers do not use sufficient pressure to crush the ends of the sheets or expand the sheets laterally (in reference to the axis of the grain) as disclosed in Tellman.

11. In my opinion, it would not have been apparent to one of skill in the art at the time the '549 application was filed, that creating a wood board using the process disclosed in the '549 application would have resulted in a product that was as strong as solid hardwood, but more flexible and more dimensionally stable. This is especially true when using a lower quality wood like gum, which one of skill in the art would have thought to be susceptible to warping or twisting and not dimensionally stable enough for such a use.

12. I further declare that all statements made herein are of my own knowledge are true and that all statements made in information and belief are believed to be true; and further that the statements are made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under § 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the above captioned patent application or any patent issued therefrom.

Respectfully submitted,

Date: 5-9-03


Signature: Joseph Torrey